



दिल्ली DELHI

W 928914

AGREEMENT

THIS AGREEMENT IS MADE ON THIS DAY 26th April ²⁰¹¹ BETWEEN THE LRS INSTITUTE OF TUBERCULOSIS & RESPIRATORY DISEASES, NEW DELHI, AN AUTONOMOUS INSTITUTE UNDER THE MINISTRY OF HEALTH AND FAMILY WELFARE, GOVERNMENT OF INDIA (HEREINAFTER REFERRED AS "LRS INSTITUTE") OF THE ONE PART AND **TELECOMMUNICATIONS CONSULTANTS INDIA LIMITED (TCIL), NEW DELHI**, A GOVT. OF INDIA ENTERPRISE UNDER THE DEPARTMENT OF TELECOMMUNICATIONS, MINISTRY OF COMMUNICATION AND INFORMATION TECHNOLOGY, GOVERNMENT OF INDIA (HEREINAFTER REFERRED TO AS "TCIL") OF THE OTHER PART.

WHEREAS, LRS INSTITUTE ISSUED A SUPPLY-CUM-WORK ORDER NO. PC/7-31/2009-10/14141 DATED 31.03.2010 TO TCIL, WHO HAS AGREED TO COMPUTERIZE VARIOUS DEPARTMENTS (OPD, MEDICAL RECORD ROOM, PATIENT BILLING, MICROBIOLOGY, PATHOLOGY, MEDICAL STORE, AND GENERAL STORE) AT LRS INSTITUTE AS MENTIONED ON THE SAID SUPPLY-CUM-WORK ORDER.

AND, WHEREAS, TCIL, HAVING EXPERTISE IN THE FIELD OF INFORMATION TECHNOLOGY AND MUTUALLY AGREED FOR THE COMPUTERIZATION OF VARIOUS DEPARTMENTS (HEREINAFTER REFERRED TO AS **PROJECT**) OF LRS INSTITUTE, ON THE TERMS & CONDITIONS SPECIFIED AND DESCRIBED IN THIS AGREEMENT.





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NOW THIS AGREEMENT WITNESS AS UNDER:-

1. LRS INSTITUTE RESPONSIBILITIES:-

- 1) Designate Project Coordinator as single point contact.
- 2) Provide approval to SRS/Design Documents.
- 3) LRS Institute will provide necessary space to keep LAN equipment, computer hardware and Networking items, etc., and computer stationery.
- 4) Shall arrange for correct, accurate, cleaned and verified data either in electronic format or hard copy required for testing, trials, demos and final demonstration of the system.
- 5) Data entry shall be the sole responsibility of LRS Institute.
- 6) Facilitate for training including place, computers, LCD and other infrastructure required (Audio-Visual aid).
- 7) LRS Institute shall ensure that proper environmental conditions are maintained for the system and site, the cables and fittings associated therewith and the electricity supply there-to.
- 8) Keep and operate the system in a proper and prudent manner in accordance with the manufacturers operating instructions and ensure that only competent trained employees (or persons under their supervision) or allow operating the system.
- 9) Ensure that external surfaces of the system are kept clean and in good conditions.

2. TCIL RESPOSIBILITIES:-

1. Supply and installation of Hardware and Network equipments, laying and testing of structured cabling with network accessories and the work has to start from computer section IIInd Floor OPD Building. Initially the network points are 65, which can be expandable. (Annexure-I, II, III).



2. To study the user department/section requirements and prepare the system requirements which includes database (backend) and programming modules (front end) and related issues from the development point of view. (**Annexure-IV**)
3. To develop web-enabled user-friendly menu driven application software which involves various master data input screens, transaction data input screens and processing options and also a provision to import/ export data.
4. The application software should have access control based on role of different users in the Institute.
5. To incorporate data validation checks and redundancy checks at various levels.
6. To generate various reports / printout by giving possible input options.
7. To facilitate backup and restore of data.
8. To submit user manual along with source code of the developed software.
9. Designate one of their officer as Project Manager as single point contact.
10. Submit the SRS/Design Documents for approval.
11. Undertake coding and testing of the system.
12. Providing training to users departments.
13. Implementation of the application software in a multi-user environment.
14. Expansion of existing LAN network by laying cable and make it operational. Wherever it is possible the existing network infrastructure be utilized along with new network equipments.
15. Assisting the LRS Institute in further development of additional modules on mutual agreed terms and conditions.
16. Five year comprehensive maintenance contract support
17. Civil / Electrical related work should be carried out in a proper manner, it includes finishing with cement and painting wherever it necessary.

3. Development of Application Software

TCIL will develop the application software for each department in the following methodology.

3.1 System Study:

Exhaustive discussions are required to be conducted with concerned user department head to understand the existing work, flow of data and information. After that a detailed document (SRS) specifying the functionality of each and every process of HMS that is required by Institute should be generated for due verification and confirmation. Each module will be approved by the in-charge or head of the concerned department.

3.2 System Design Document

Prepare SDD using the approved SRS. The format of SDD shall be in compliance with ISO 9001 standards. It gives an overview of the process and defines the design aspect of the application software.

3.3 Design

Top down approach is to be followed during the design. The process has to be divided into modules and sub modules. Database design shall be with full integrity constraints.



3.4 Development

Programming procedures, database triggers are to be developed by incorporating the business rules and reduce the burden on client and network. The developer will make the initial unit level testing. The coding shall be in accordance with the set guidelines.

3.5 Testing:

Testing shall be carried out at Unit level, Module level, Integration and System level to the satisfaction of the department/ section incharge of the concerned software module.

- i) Unit level Testing: Each form/ interface shall be tested for its specified functionality. All validations will be crosschecked. Field level navigation and any procedures associated with them will be verified. The tool bar functionality, authentication will be checked.
- ii) Module Level Testing: Each module shall be tested for its specified goal. All connected interfaces will be tested with user data and its each functional specification will be checked.
- iii) Integration Testing: The modules are to be integrated and the inter-module communication will be checked. Out puts from other modules and corresponding inputs will be checked in this phase.
- iv) System Testing: During this phase the performance of each module in the peak load is to be tested which includes boundary cases, performance, peak load, recovery and security testing.

3.6 Documentation and Training:

User Manuals are to be prepared describing each screen and the methodology in which the user can access the screen to enter new data or retrieving the existing information. System Manuals or References are also required in which each screen with its internal functionality and linkages along with the input and output database tables are described. Identified end users of each department are to be given hands on training as mentioned below.

| Department | No of users |
|---------------------|-------------|
| OPD Registration | 5 |
| Medical Record Room | 3 |
| Microbiology | 3 |
| Pathology | 3 |
| Medical Store | 3 |
| General Store | 3 |
| Patient Billing | 3 |



4. Project Schedule

| S. No. | Month List of activities | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------|-----------------------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1. | Study & Finalization of SRS | ← | → | | | | | | | | | | |
| 2. | Approval of SRS | | | ◆ | | | | | | | | | |
| 3. | Design | | | ← | → | | | | | | | | |
| 4. | Develop. & Internal Testing | | | | ← | → | | | | | | | |
| 5. | Acceptance Testing | | | | | | | ← | → | | | | |
| 6. | Hardware Installation | | | | | | ← | → | | | | | |
| 7. | Implementation at Site | | | | | | | | ← | → | | | |
| 8. | Documentation & Training | | | | | | | | | | ← | → | |

For Application software development the time given is 12 weeks per module. There are seven modules. However, work on seven modules can be started simultaneously and the entire work may be completed in one year by the TCIL by adopting the following project schedule.

4.1 Project Schedule for the Development of Application Software for 7 modules:-

- Finalization of SRS within 2 months from the date of signing the Agreement.
- Demonstration of Prototype within 5 months from the date of signing the Agreement.
- Development of Application Software within 8 months from the date of signing the Agreement.
- User Acceptance and Testing of Developed Application Software within 10 months from the date of signing the Agreement.
- Implementation of Developed Application Software within 11 months from the date of signing the Agreement.
- Documentation and training within 12 months from the date of signing the Agreement.

4.2 Project Schedule for supply of Hardware, System Software and network equipments, Computer Furniture including civil work:

- Delivery of Hardware, system software and networking components and computer furniture in 6 to 8 months from the date of signing the Agreement.
- Installation of hardware, system software and networking equipments within 8 months from the date of signing the Agreement.
- Completion of Civil Work within 7 months from the date of signing the Agreement.

5. Payments

LRS INSTITUTE will make payments through irrevocable L/C of Punjab National Bank in favour of Telecommunications Consultants India Ltd.

(1) Hardware, System Software and network equipments, Computer Furniture costs – Rs.24,05,111/-

- 90% Payment against supply of Hardware, System Software, Network Equipment, Desktop Computer including civil work.
- 10% after satisfactory completion of Contract period. The date of completion of contract period should be the date of commencement of comprehensive maintenance service. One comprehensive maintenance contract (CMC) for



whole system will be provided after completion of contract period. Extended warranty cover for hardware, if needed will be provided by TCIL till the commencement of CMC.

- (2) Development of Application Software for 7 departments, Costs Rs.21,11,920/-
- 20% of Rs 21,11,920/- as an Advance
 - 20% of Rs 21,11,920/- on Finalization of SRS
 - 20% of Rs 21,11,920/- on Demonstration of Prototype and Complete Development of Application Software
 - 20% of Rs 21,11,920/- on User Acceptance and Testing.
 - Remaining 20% after completion for training and satisfactorily 30 days Implementation.

Note: Any change/addition in Taxes/Levies will be to the Client's account.

6. Penalty / Liquidity Damages :

In case of delay of either supply of equipments / development work a penalty will be imposed @ 2% of total order cost per week, to the maximum of 10% of total work order cost. (Part week would be counted as one week i.e. 1-7 days means 1 week, 8-14 days means 2 weeks, 15-21 days means 3 weeks etc.). The delay will be taken as per the project schedule.

7. Development of Additional Application Software

Application Software package should have provision to expand to other departments like PFT, Radiology etc. in a phased manner or in next phase on same platform. TCIL will charge Rs.51,906/- (inclusive of service tax @10.3%) per man month against development of additional module and Rs.2,595/- (inclusive of service tax @10.3%) per day for providing additional training, if required.

8. Assignment Clause

This Agreement shall be binding upon both the parties hereto and their respective successors and assigns, but it shall not be assigned, in whole or in part, by either party, to any other organization without the prior consent of the other except, that either part's interests shall be assignable through merger, consolidation or reorganization or sale or transfer substantially of all its assets.

9. Warranty /Guarantee

TCIL will provide

- One year warranty/guarantee against purchased hardware, network equipment and system software from the date of installation. TCIL will provide extended warranty till comprehensive maintenance contract for whole system will start.
- One year warranty for Application software from the date of implementation of all the modules of the application.

10. Performance Bank Guarantee

TCIL shall provide a Performance Bank Guarantee 5% of Total Work order in the form of either Bank Fixed Deposit or Bank Guarantee for a period of 60 days beyond the



completion of warranty period. TCIL will submit the performance bank guarantee within 15 days from the date of signing of Agreement.

11. Ownership Of Source Code

The Source Code of the developed application software package will be the property of LRS Institute. The same will be handed over to the Computer Section immediately after the implementation.

However TCIL shall have the right to redevelop / customize similar packages for other organizations.

12. Deliverables

TCIL would deliver the following items:

| S. No. | Item | Qty/ Remarks |
|--------|--|-----------------------|
| 1. | Submission of SRS | Hard Copy & Soft Copy |
| 2. | System Manual (With description of System Design, Entity Relationship Diagram, Database Flow Design, etc.) | Hard Copy & Soft Copy |
| 3. | User Manual including operating instruction & error handling procedures for each module | Hard Copy & Soft Copy |
| 4. | Complete Source Code with database backup | On CD Media |

13. Five Years Comprehensive Annual Maintenance Support (CMC)

TCIL has agreed to provide 5 years comprehensive maintenance contract (CMC) support which would start by a separate Agreement made between TCIL and LRS Institute. This includes providing one Resident Engineer to look after hardware and network equipment and another Resident Engineer for Database maintenance, Application Software Trouble shooting, incorporation of changes and other utilities. The agreement of CMC will be made between LRS Institute & TCIL before the expiry of warranty so that there should not be any interruption in services.

13.1 Definitions

In this Agreement, unless the context otherwise requires, the following expressions shall have the following meanings:

- 'the system' means all items and services required for the development of the computerization of various departments of LRS Institute of TB & RD.
- 'the location' means LRS Institute premises in which the system is installed.
- 'the maintenance charges' means the charges payable by the LRS Institute towards the comprehensive annual maintenance contract.
- 'working hours' means LRS Institute working hours from 9.00 AM to 4.00 PM for all working days except Sunday and public holidays.

13.2. Scope of CMC:

I. Hardware/Networking Equipments



1. The equipment shall be repaired / rectified as and when the same is reported to be out of order which includes replacement of defective parts/ components without any extra cost. The parts replaced will be new or equivalent performance of respective brands. The old parts will be property of the TCIL.
2. Identifying the fault in any part of UTP cabling/ equipment of the network and ensuring physical network connectivity of nodes including hubs or switches.
3. Maintenance of I/O, dropping card, connecting card, wall mount, patch panel etc.
4. In the event of any spare part/ sub assembly going out of the production or any equipment goes beyond economic repair the TCIL shall ensure the availability and if not possible the latest available device will be provided with prior approval of the Institute to keep the system operational.
5. Repair of keyboard or mouse was restricted to two times and if the same repair occurred on third time in a month, the TCIL is required to replace with the new of equivalent brand.
6. The TCIL should ensure proper earthing and UPS safety precaution such as fuse in working condition to prevent high voltage damage. The Institute will procure the required new batteries and the TCIL is required to put those batteries inside the UPS by removing the old batteries.

II. System Software/Application Software/Database

1. Installation / Re-installation/ Restoration of operating system, drivers, MS-Office and Anti-virus software.
2. Installation of Application software at each user location and database tuning.
3. Configuration/ Restoration of internet connection settings, existing network settings and network management
4. Taking backup and transfer of data from one system to other on demand.
5. Recovery of data/Restoration in case the system crashes.

III. Resident Engineer

- 1) TCIL is required to provide two Resident Engineers from 9 a.m. to 4 p.m. on all working days. The Resident Engineer should be Degree/Diploma Holder in relevant field with certification (CISCO/Microsoft/Oracle) with 2 years experience in hardware, network maintenance, PC trouble shooting, Database Maintenance, Database tuning and Development of Application Software.
- 2) LRS Institute will not provide any conveyance or phone to the Resident Engineers.



13.3 Year-wise Charges for CMC

The Five years comprehensive Annual Maintenance Charges of Rs.26,47,200/- with year wise breakup as follows :

| ACMC cost for (Years) | Hardware Engineer (A) per manmonth | Software Engineer (B) per manmonth | Total Yearly Cost for Hardware Engineer (A) | Service Tax @10.3% on yearly cost of Hardware Engineer | Total Yearly cost for software Engineer (B) | Service Tax @10.3% on yearly cost of Software Engineer | Total |
|-----------------------|------------------------------------|------------------------------------|---|--|---|--|------------------|
| 1 st Year | 11,760 | 18,820 | 1,41,120 | 14,535 | 2,25,840 | 23,262 | 4,04,757 |
| 2 nd Year | 14,120 | 21,180 | 1,69,440 | 17,452 | 2,54,160 | 26,178 | 4,67,230 |
| 3 rd Year | 16,470 | 23,530 | 1,97,640 | 20,357 | 2,82,360 | 29,083 | 5,29,440 |
| 4 th Year | 18,820 | 25,880 | 2,25,840 | 23,262 | 3,10,560 | 31,988 | 5,91,650 |
| 5 th Year | 21,180 | 28,240 | 2,54,160 | 26,178 | 3,38,880 | 34,905 | 6,54,123 |
| Total | | | | | | | 26,47,200 |

Note: Any change/addition in Taxes/Levies will be to the Client's account.

13.4. CMC Not included / Not Covered:

- Repair / Damage due to accident, neglect of misuse, and cause of electrical power supply or high voltage power spikes other than ordinary use.
- Such service which is impractical for the company's representative to render because of alternation in equipment and its peripherals by mechanical or electrical means to another devices by unauthorised persons. The service charges specified are for normal usage and are only in respect of the features installed on the machines on the date of commencement of the Agreement. The company shall levy additional charges as applicable on features installed subsequently.
- Consumable parts like laser printer cartridges, printer ribbons, computer papers, plastic parts due to miss handling, storage media (Floppy, CD, DVD), and printer head (Dot Matrix Printer).

13.5. Uptime Guarantee:

- TCIL guarantee 95% (ninety five percent) uptime of the equipment covered under this Agreement during any calendar year, which would be calculated as :
 - Total No. of days in a year
 - Less Hospital Holidays
 - Total No. of working days (a – b)
 - 95% guarantee uptime (95% of c)

Breakdown for 2 hours or less in a day shall not be considered as uptime.

- In case of major breakdown the fault will be attended by the company within 24 hours. However, the company shall not be liable for delays in performance due



to cause(s) beyond its reasonable control or acts of civil or military authority, strikes or labour disturbances, floods, epidemics or war.

- c) The company further ensures that the equipment is not down for any want of spare parts.

13.6 Penalty Clause:

- a) In case the system is completely down for more than 24 hours and the company is not able to provide alternative facility in lieu of loss of equipment uptime, a sum equal to maintenance charges would be deducted for the number of days actually lost from the date of reporting the break-down/ complaint. Further the CMC shall be extended by twice the period of short fall from 95% uptime without any additional charges.
- b) In case the Resident Engineer remains absent / or on leave during working days, double the rate of pro-rata payment made for engineers in CMC (as quoted in the bid) per day of the absentee/ leave will be deducted from the CMC charges.

13.7 Preventive Maintenance:

The TCIL shall conduct preventive maintenance (including but not limited to inspection, testing, satisfactory execution of all diagnostics, cleaning and removal of dust and dirt from the interior and exterior of the equipment, and necessary repair of the equipments) once in quarter on a working day of the LRS Institute. The LRS institute has the right to adjourn preventive maintenance from any schedule time to a date and time convenient to the LRS institute.

13.8 Place for Equipment Repair:

The place for minor repair or maintenance of equipments will be respective user site of the concerned department in the LRS Institute. In event of any major breakdown and if the repair cannot be carried out at the LRS Institute premises, then the defect be rectified at the service centre of the TCIL. But, dismantling, packing forwarding and transportation charges, etc. if any shall be borne by the TCIL.

13.9 Payments (CMC)

LRS Institute shall release the payment of CMC on quarterly basis. TCIL shall deposit a Bank Guarantee for the amount of 1st quarter CMC charges which shall be kept against performance guarantee and will be released after 60 days of completion of CMC contract. TCIL will deposit this Bank Guarantee before the release of 1st quarter CMC charges.

14. Liability and Indemnities:

TCIL must warrant that the developed application software do not violate or infringe upon any patent, copyright, trade secret or other property right of any other person or other entity, the company must indemnify the LRS Institute of TB & R.D. from any claim, directly or indirectly resulting from or arising out of any breach or claimed breach of such rights.



LRS also warrants TCIL against any loss, damages or any claim directly or indirectly resulting from or arising out of any break of contract or due to any act or omission of LRS or any of the employees of LRS.

15. Confidentiality

Both the parties including its consultants/ sub-consultants or sub-contractor(s), Vendors and their employees / personnel shall not, either during the Agreement or after expiry of this Agreement, disclose any information relating to the services, contract or the client's business operations without prior written consent of other party.

16. Validity

This Agreement shall come in force immediately after the signing both the parties and shall remain valid for a period of 84 months from the date of signing of the Agreement including equipment warranty period of 12 months. The validity of Agreement may increase proportionately if the contract period increases by any reason.

17. Arbitration

In the event of any dispute arising out of this Agreement and breach of any condition regarding this Agreement would be resolved by the Director of LRS Institute and Group General Manager (IT&NW) of TCIL. In case, if it is not settled, the same shall be referred to Arbitration to secretary, Department of Public Enterprises for appointment Permanent Machinery of Arbitration (PMA), Department of Public Enterprise as Arbitrator to resolve the dispute and venue of arbitration shall be New Delhi. The Arbitral Tribunal shall consist of 2 arbitrators one of which shall be the Director of LRS Institute and other will be a person nominated by CMD, TCIL which will be binding on both the parties. Any legal disputes arising shall be pursued within the jurisdiction of Delhi.

18. a) Force Majeure

1. Neither LRS Institute nor TCIL shall be liable for failure to meet contractual obligations due to Force Majeure.
2. Force Majeure impediment is taken to mean unforeseen events, which occur after signing of this Agreement including but not limited to strikes, blockade, war, mobilization, revolution or riots, natural disaster, acts of God, in so far as such as event prevents or delays the contractual party from fulfilling its obligations.
3. In case the Force Majeure conditions continue for more than 60 days, both parties shall discuss the effect of such conditions on the Agreement and mutually decide the course of action to be followed.
4. This Agreement will come into effect from the date of its signing by LRS Institute and TCIL.



b) Notice

Any notice, request, demand, approval, consent or other communication provided or permitted hereunder shall be in writing and given by personal delivery or sent by registered mail or by ordinary mail, postage prepaid, or by telegram, telex addressed to the party for which, it is intended at its address as follows:-

LRS INSTITUTE OF TB & RD : DIRECTOR,
LRS INSTITUTE OF TB & RD
Sri Aurobindo Marg,
New Delhi-110030

TELECOMMUNICATIONS
CONSULTANTS INDIA LTD : GROUP GENERAL MANAGER (IT & NW)
TELECOMMUNICATIONS
CONSULTANTS INDIA LIMITED
TCIL Bhawan,
Greater Kailash-I,
New Delhi-110048

THE PARTIES HAVE EXECUTED THIS AGREEMENT IN DUPLICATE ON THIS DAY OF IN THE PRESENCE OF WITNESS INDICATED.

For and on behalf of
LRS Institute of Tuberculosis &
Respiratory Diseases

Signature: G.V. Raju

Name: G.V. RAJU

Date: 26-04-2011

Place: New Delhi

In the Presence of

1. Signature:

Name:

Vijay Bhatt

2. Signature:

Name:

Pernam

For and on behalf of
Telecommunications Consultants
India Limited

Signature:

Ashutosh Pandey

Name: ASHUTOSH PANDEY, GGM (IT&NW)

Date: 26th April 2011

Place: N. Delhi

In the Presence of

1. Signature:

Name:

Hardeep Kan.
HARDEEP KAUR

2. Signature:

Name:

Monica Arya
MONICA ARYA



Annexure – I

| Sno. | Item Specification |
|------|--|
| 1. | Database Server <ul style="list-style-type: none"> • CPU – Dual – Xeon Quad Core, 5540 Series 2.5 GHz or above, 8 MB Internal cache per socket or equivalent • Memory – 16GB, DDR-III, 1066 MHz ECC memory, Upgradeable to 64GB • HDD Controller – On board support for Raid 0 & 1 on SAS controller • HDD – 4 * 300 GB SAS H/S HDDs, 10k/15k RPM • RAID Controller – 0, 1, 5 • Ethernet Ports – 2 * Dual port GIGA bit NIC cards with auto sensing. Shall have iSCSI initiator 100/1000 on copper (Total 4 ports) • PCI slots – Provision for 2 * PCI express PCI x 4 or PCI x 8 • Graphics adapter – Standard video adapter with 8 MB/16MB • Optical drive – DVD R/W internal drive • Form factor – 2U Rack model with rail kit • I/O Ports – 2 * USB Front, 2 * USB Rear, 1 VGA port • Redundant power supply – Redundant power supply 1 + 1 • Management – Remote management facility • O/S – Certified for Windows Server 2003/2008 and linux • Bench Mark – Server should have published specint 2006 and specfp 2006 results |
| 2. | Application Server <ul style="list-style-type: none"> • CPU – Dual – INTEL Xeon Quad Core, 5540 Series 2.5 GHz or above, 8 MB internal cache per socket or equiv. • Memory – 16 GB, DDR-III, 1066 MHz ECC memory, Upgradable to 64GB • HDD Controller – On board support for Raid 0 & 1 on SAS controller • HDD – 2 * 300 GB SAS H/S HDDs, 10k/15k RPM • RAID Controller – 0, 1, 5 • Ethernet Ports – 2 * Dual port GIGA bit NIC cards with auto sensing. Shall have iSCSI initiator 100/1000 on copper (Total 4 ports) • PCI slots – Provision for 2 * PCI express PCI x 4 or PCI x 8 • Graphics adapter – Standard video adapter with 8 MB/16MB • Optical drive – DVD R/W internal drive • Form factor – 2U Rack model with rail kit • I/O Ports – 2 * USB Front, 2 * USB Rear, 1 VGA port • Redundant power supply – Redundant power supply 1 + 1 • Management – Remote management facility • O/S – Certified for Windows Server 2003/2008 and linux • Bench Mark – Server should have published specint 2006 and specfp 2006 results • 32U, 19" Rack for system, KVM switch with 19" TFT LCD, Keyboard, Mouse |
| 3. | Desktop Computer <ul style="list-style-type: none"> • CPU – Core 2 Duo E 6850 processor, 3.00 GHz, 4 MB L2, 1333MHz FSB. • Memory – 1 GB, DDR2- 667 MHz expandable to 4GB • Graphics adapter – Internal • Ethernet Ports – Dual GIGA bit Ethernet port autosensing. |



| | |
|----|---|
| | <ul style="list-style-type: none"> • PCI slots – Provision for additional cards, PCI express, PCI x 4 or PCI x 8, PCIx16 • Optical drive – DVD R/W internal drive • HDD – 250 GB SATA-II drives 7200 RPM • HDD Controller – SATA-II, internal support for RAID 0 & 1 • Form factor – Tower model • Key Board – Standard key board same as OEM • Mouse – Standard Optical scroll mouse as OEM • I/O Ports – 2 * USB, 1 * Serial • Monitor – 19" TFT LCD • Audio – Speaker and mike set • O/S – Certified for Windows XP Professional preloaded with media and license |
| 4. | <p>Laser Printer</p> <p>Resolution in DPI : Mono 600 x 600</p> <ul style="list-style-type: none"> • Paper Size : A-4 • Print Speed in PPM (A-4 size) : 14 • Port : 1 USB, Memory in MB : NA • Network Card 10/100 : NA • Duplexing : NA |



Annexure – II Network Equipment


| S. No. | Configuration | Qty |
|--------|--|-----|
| 1. | AMP 4-pair, Cat 6 UTP cable (305M Bundle) | 12 |
| 2. | AMP Information Outlets Cat-6 (Single SMB with FacePlate) | 65 |
| 3. | AMP Single Port British Style Shuttered Face Place | 65 |
| 4. | 24 Port Patch Panel | 4 |
| 5. | PVC Wire Manager (1U) | 4 |
| 6. | AMP Cat-6 mounting Patch Cord 3 ft | 70 |
| 7. | AMP Cat-6 mounting Patch Cord 7 ft | 85 |
| 8. | 9 U Rack, Wall mount 500 mm x 600 mm, front glass/vented door (lockable) a) PDU 06 points 5 amp b) Mounting Hardware (pac. of 10) | 3 |
| 9. | 12 U Rack, Floor standing, 500 mm x 600 mm, Front glass/vented door (lockable) a) PDU 06 points 5 amp b) Mounting Hardware (pac. of 10) | 1 |
| 10. | 8 Port L-2 Switch 10/100 Mbps (DES 1108) D-Link | 5 |
| 11. | 24 Port L-2 Switch 10/100/1000 Mbps (Gigabit) (DES 1224T) D-Link | 3 |
| 12. | 16 Port L-2 Switch 10/100 Mbps (DSS 16+ D-Link | 3 |
| 13. | AMP Multimode Fiber optic outdoor armoured cable (OM3) Multi mode (MM) 850nm laser optimized 50/125 micron, support 10 G Ethernet upto 300m 6 Core (per meter) | 550 |
| 14. | AMP Optical Fiber Patch Cord, MM, SC to LC-3 meter | 4 |
| 15. | AMP FIBER COMPONENTS Optical Fiber connectors SC type SC- Connector (Multimode) | 24 |
| 16. | AMP 1U/2U LIU Encloser multi mode SC with Coupler | 3 |
| 17. | Tray 150 * 405 mm | 350 |
| 18. | Tray 50 * 40 mm | 270 |
| 19. | GI Pipe 32 mm Diameter | 70 |
| 20. | Supply and installation / fixing of 1 diameter GI pipe under ground and on surface (per meter) | 70 |
| 21. | Other material like paint, cement, digging work ,etc | 1 |



Annexure – III Computer Furniture

| | |
|---|---|
| 1 | Computer Furniture <ul style="list-style-type: none">• Computer Table with sliding keyboard and storage shelf for UPS, Laser Printer and other accessories. Size : 48"x30"x30"• Computer Operating Chair with Arms – on 5-prong base with castors, with arms neatly upholstered and with backrest; has adjustment for height, angle recline and desired positioning of backrest |
|---|---|




Administrative Officer
L.R.C. Institute of TB & Respiratory Diseases
Sri Aurobindo Marg, New Delhi-30